

09/373,182

- 2 -

PC10240A

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 60 (Cancelled)

Claim 61 (Currently Amended) A method of inhibiting the cleavage of TNF- α from cell membranes in a human comprising administering to such human an effective amount of a hydroxamic acid compound, or a pharmaceutically acceptable salt thereof, selected from the group consisting of:

(2R, 3S)-1-(4-benzyloxy-benzenesulfonyl)-3-methyl-piperazine-2-carboxylic acid

hydroxamide;

(2R, 3S)-3-methyl-1-[4-(2-methyl-benzyloxy)-benzenesulfonyl]-piperazine-2-

carboxylic acid hydroxamide;

(2R, 3S)-4-acetyl-3-methyl-1-[4-(2-methyl-benzyloxy)-benzenesulfonyl]-

piperazine-2-carboxylic acid hydroxamide;

(2S,3R,6S)-4-[4-(2,5-dimethyl-benzyloxy)-benzenesulfonyl]-2,6-dimethyl-

morpholine-3-carboxylic acid hydroxamide;

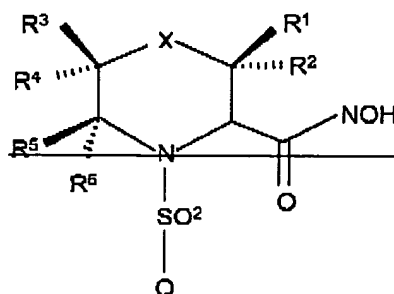
(2S,3R,6R)-4-[4-(4-fluoro-benzyloxy)-benzenesulfonyl]-6-hydroxymethyl-2-

methyl-morpholine-3-carboxylic acid hydroxamide; and

(2S,3R,6R)-4-[4-(4-fluoro-benzyloxy)-benzenesulfonyl]-6-hydroxymethyl-2-

methyl-morpholine-3-carboxylic acid hydroxamide;

comprising the formula:



— or the pharmaceutically acceptable salt thereof, wherein

— X is oxygen, sulfur, SO, SO₂ or NR⁷;

09/373,182

- 3 -

PC10240A

~~— R¹, R², R³, R⁴, R⁵ and R⁶ are selected from the group consisting of hydrogen, hydroxy, NH₂, CN, (C₁-C₆)alkyl, (C₂-C₆)alkenyl, (C₆-C₁₀)aryl, (C₂-C₆)alkenyl, (C₂-C₉)heteroaryl, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₆-C₁₀)aryl, (C₂-C₆)alkynyl, (C₂-C₉)heteroaryl, (C₂-C₆)alkynyl, (C₁-C₆)alkylamino, [(C₁-C₆)alkyl]₂amino, (C₁-C₆)alkylthio, (C₁-C₆)alkoxy, perfluoro(C₁-C₆)alkyl, perfluoro(C₁-C₆)alkoxy, (C₆-C₁₀)aryl, (C₂-C₉)heteroaryl, (C₆-C₁₀)arylamino, (C₆-C₁₀)arylthio, (C₆-C₁₀)aryloxy, (C₂-C₉)heteroarylamino, (C₂-C₉)heteroarylthio, (C₂-C₉)heteroaryloxy, (C₂-C₆)cycloalkyl, (C₁-C₆)alkyl(hydroxymethylene), piperidyl, (C₁-C₆)alkylpiperidyl, (C₁-C₆)acyl, (C₁-C₆)acylamino, (C₁-C₆)acylthio, (C₁-C₆)acyloxy, (C₁-C₆)alkoxy (C=O), CO₂H, H₂N (C=O), (C₁-C₆)alkyl NH (C=O), and [(C₁-C₆)alkyl]₂N (C=O);~~

~~— wherein said (C₁-C₆)alkyl is optionally substituted by one or two groups selected from (C₁-C₆)alkylthio, (C₁-C₆)alkoxy, trifluoromethyl, halo, CN, (C₆-C₁₀)aryl, (C₂-C₉)heteroaryl, (C₆-C₁₀)arylamino, (C₆-C₁₀)arylthio, (C₆-C₁₀)aryloxy, (C₂-C₉)heteroarylamino, (C₂-C₉)heteroarylthio, (C₂-C₉)heteroaryloxy, (C₆-C₁₀)aryl, (C₆-C₁₀)aryl, (C₂-C₆)cycloalkyl, hydroxy, piperazinyl, (C₆-C₁₀)aryl, (C₁-C₆)alkoxy, (C₂-C₉)heteroaryl, (C₁-C₆)alkoxy, (C₁-C₆)acylamino, (C₁-C₆)acylthio, (C₁-C₆)acyloxy, (C₁-C₆)alkylsulfinyl, (C₆-C₁₀)arylsulfinyl, (C₁-C₆)alkylsulfonyl, (C₆-C₁₀)arylsulfonyl, amino, (C₁-C₆)alkylamino or ((C₁-C₆)alkyl)₂amino;~~

~~— R⁷ is hydrogen; (C₁-C₆)alkyl optionally substituted by one or more of hydroxy, CN, (C₁-C₆)alkylamino, (C₁-C₆)alkylthio, (C₁-C₆)alkoxy, perfluoro(C₁-C₆)alkyl, (C₆-C₁₀)aryl, (C₆-C₁₀)arylthio, (C₆-C₁₀)aryloxy, (C₂-C₉)heteroarylamino, (C₂-C₆)cycloalkyl, (C₁-C₆)alkyl(hydroxymethylene), piperidyl, (C₁-C₆)alkylpiperidyl, (C₁-C₆)acyl, (C₁-C₆)acylamino, (C₁-C₆)acyloxy, (C₁-C₆)alkoxy (C=O), CO₂H, (C₁-C₆)alkyl NH (C=O), and [(C₁-C₆)alkyl]₂N (C=O); (C₆-C₁₀)arylsulfonyl, (C₁-C₆)alkylsulfonyl, (C₁-C₆)alkyl NH (C=O); (C₁-C₆)alkoxy (C=O); (C₁-C₆)alkyl (C=O); [(C₁-C₆)alkyl]₂N (C=O); or (R⁸R⁹N) (C=O) where R⁸ and R⁹ are taken together with the nitrogen that they are attached to form a ring selected~~

09/373,182

- 4 -

PC10240A

from azetidiny!, pyrrolidiny!, piperidiny!, morpholinyl and thiomorphonyl;
where Q is (C₆-C₁₀)aryl(C₁-C₆)alkoxy(C₆-C₁₀)aryl, (C₆-C₁₀)aryl(C₁-
C₆)alkoxy(C₁-C₁₀)heteroaryl, (C₁-C₁₀)heteroaryl(C₁-C₆)alkoxy(C₆-
C₁₀)aryl, or (C₁-C₁₀)heteroaryl(C₁-C₆)alkoxy(C₁-C₁₀)heteroaryl;
~~with the proviso that when X is SO or SO₂ and R₃ and R₄ are a substituent~~
~~comprising a heteroatom, the heteroatom cannot be bonded to the ring;~~
and with the proviso that at least one of R¹-R⁶ must be (C₁-C₆)alkyl;
and with the proviso that when X is oxygen or sulfur and R³-R⁶ are each hydrogen
then R¹ and R³ cannot both be methyl;
that possesses an in vitro IC₅₀ selectivity for TACE over MMP-1 of at least 100
fold; wherein MMP-1 activity is determined by an MMP-1 in vitro assay
and wherein TACE activity is determined by a human monocyte assay.
Claims 62 - 83 (Cancelled)